

STN Columbus

* * * * * * * * * * * * Welcome to STN International * * * * * * * * *

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NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JUL 12 BEILSTEIN enhanced with new display and select options,
resulting in a closer connection to BABS
NEWS 4 AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display
fields
NEWS 5 AUG 02 CAplus and CA patent records enhanced with European and Japan
Patent Office Classifications
NEWS 6 AUG 02 The Analysis Edition of STN Express with Discover!
(Version 7.01 for Windows) now available
NEWS 7 AUG 27 BIOCOMMERCE: Changes and enhancements to content coverage
NEWS 8 AUG 27 BIOTECHABS/BIOTECHDS: Two new display fields added for legal
status data from INPADOC
NEWS 9 SEP 01 INPADOC: New family current-awareness alert (SDI) available
NEWS 10 SEP 01 New pricing for the Save Answers for SciFinder Wizard within
STN Express with Discover!
NEWS 11 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS 12 SEP 27 STANDARDS will no longer be available on STN
NEWS 13 SEP 27 SWETSCAN will no longer be available on STN
NEWS 14 OCT 28 KOREPAT now available on STN

NEWS EXPRESS OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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* * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:00:22 ON 29 OCT 2004

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| FULL ESTIMATED COST | | 0.21 | 0.21 |

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FILE COVERS 1907 - 29 Oct 2004 VOL 141 ISS 19
FILE LAST UPDATED: 28 Oct 2004 (20041028/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s fuel and (vitamin e or tocopherol)
 340874 FUEL
 154939 FUELS
 389767 FUEL
 (FUEL OR FUELS)
 176528 VITAMIN
 49415 VITAMINS
 195026 VITAMIN
 (VITAMIN OR VITAMINS)
 1802584 E
 28667 VITAMIN E
 (VITAMIN (W) E)
 27205 TOCOPHEROL
 8044 TOCOPHEROLS
 29454 TOCOPHEROL
 (TOCOPHEROL OR TOCOPHEROLS)
L1 45 FUEL AND (VITAMIN E OR TOCOPHEROL)

=> s l1 and carotene
 27960 CAROTENE
 20157 CAROTENES
 38399 CAROTENE
 (CAROTENE OR CAROTENES)
L2 2 L1 AND CAROTENE

=> d 12 1-2 all

L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
AN 2003:334695 CAPLUS
DN 138:336957
ED Entered STN: 02 May 2003
TI Corn oil processing and products comprising corn oil and corn meal obtained from corn
IN Jakel, Neal T.; Kotowski, Doug; Ingvalson, Joel; Beaver, Michael J.; Ulrich, James F.; Amore, Francis; Tupy, Michael J.; Fox, Eugene J.; Patist, Alexander
PA Renessen, LLC, USA
SO U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 927,836.
CODEN: USXXCO
DT Patent
LA English
IC ICM C11C001-00
 ICS A21D002-00
NCL 554010000; 554020000; 426622000
CC 17-9 (Food and Feed Chemistry)
 Section cross-reference(s): 18, 45, 51, 62
FAN.CNT 10

STN Columbus

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 2003083512 | A1 | 20030501 | US 2002-47725 | 20020115 |
| | US 6610867 | B2 | 20030826 | | |
| | US 2002193617 | A1 | 20021219 | US 2001-927836 | 20010810 |
| | US 6648930 | B2 | 20031118 | | |
| | US 2003224496 | A1 | 20031204 | US 2003-368521 | 20030218 |
| PRAI | US 2000-637843 | A2 | 20000810 | | |
| | US 2001-927836 | A2 | 20010810 | | |
| | US 1999-249280 | A2 | 19990211 | | |
| | US 2002-47725 | A2 | 20020115 | | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|--|---------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | US 2003083512 | ICM | C11C001-00 |
| | | ICS | A21D002-00 |
| | | NCL | 554010000; 554020000; 426622000 |
| | US 2003083512 | ECLA | A23D009/00; A23K001/18K; A23K001/18L2; A23K001/18N;
A23K001/18S; A23L001/10M; A23L001/105B; A23L001/30C;
C08B030/10; C08L099/00; C11B001/04; C11B001/10;
C11B003/00B; C12P007/06; A23D009/007; A23K001/00B2;
A23K001/14; A23K001/16G; A23K001/16L; A23K001/18 |
| | US 2002193617 | ECLA | A23D009/00; C11B001/10; C11B003/00B; C12P007/06;
A23D009/007; A23J001/14C2; A23K001/00B2; A23K001/04;
A23K110/; A23K001/10C; A23K001/14; A23K001/16G;
A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2;
A23K001/18N; A23K001/18S; A23L001/10M; A23L001/30C;
B02B001/00; C08B030/10; C08L099/00; C11B001/04;
C11B001/06 |
| | US 2003224496 | ECLA | A23D009/00; A23D009/007; A23J001/14C2; A23K001/00B2;
A23K001/04; A23K001/10; A23K001/10C; A23K001/14; A23K;
A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2;
A23K001/18N; A23K001/18S; A23L001/10M; A23L001/105;
A23L001/30C; B02B001/00; C08B030/10; C08L099/00;
C11B001/04; C11B001/06; C11B001/10; C11B003/00B; C12P |

AB Corn oil and corn meal obtained from corn are included in useful products. The corn oil is extd. from the corn to form the corn meal. The corn grain process generally includes the steps of cracking corn grain having a total oil content of from about 3% to 30% by wt. and extg. the corn oil from the cracked corn grain. The corn oil is useful for making nutritionally enhanced edible oil or cooking oil, lubricants, biodiesel, fuel, cosmetics and oil-based or oil-contg. chem. products. The extd. corn meal is useful for making enhanced animal feed rations, snack food, blended food products, cosmetics, and fermn. broth additive.

ST corn meal oil manuf feed food fuel cosmetic

IT Fats and Glyceridic oils, biological studies
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (animal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Food
 (bars; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Diesel fuel substitutes
 (biodiesel; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Oryza sativa
 (bran; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Bakery products
 Triticum aestivum
 (byproducts; corn oil processing and products comprising corn oil and corn meal obtained from corn)

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- IT Solvent extraction
 - (continuous; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Food viscosity
 - (controls for; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Glutens
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 - (corn meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Acidity
 - Air
 - Antioxidants
 - Biodegradable materials
 - Bleaching
 - Bread
 - Breakfast cereal
 - Canola
 - Cottonseed
 - Crosslinking agents
 - Deodorization
 - Dietary fiber
 - Feed additives
 - Feeding experiment
 - Food additives
 - Food processing
 - Gallus domesticus
 - Glycine max
 - Helianthus annuus
 - Herb
 - Hordeum vulgare
 - Micelles
 - Nutrients
 - Pigments, biological
 - Rapeseed
 - Rapeseed
 - Solanum tuberosum
 - Sorghum bicolor
 - Spices
 - Thickening agents
 - Vinegar
 - Zea mays
 - (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Aldehydes, biological studies
 - Anhydrides
 - Epoxides
 - RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 - (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Amino acids, biological studies
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 - (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Canola oil
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 - (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Carotenes, biological studies
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 - (corn oil processing and products comprising corn oil and corn meal

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- obtained from corn)
- IT Enzymes, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Lipids, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Mineral elements, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Olive oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Palm oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Safflower oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Soybean oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Sterols
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Sunflower oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Tocopherols
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Vitamins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Corn oil
RL: FFD (Food or feed use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Flours and Meals
(corn; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Bos taurus

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(dairy cattle; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Vitamins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(fat-sol.; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Flours and Meals
(feather meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Aquaculture
Bos taurus
Equus caballus
Poultry
Sus scrofa domestica
(feed for; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Catfish
Tilapia
(feeding; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Zea mays
(flour and meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Binders
(for food; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Oryza sativa
(hulls; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Beverages
(low calorie; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Feather
(meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Bone meal
Meat
(meat-and-bone meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Triticum aestivum
(middlings; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Cooking
(oils for; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Seed
(oilseed, meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Flours and Meals
(oilseed; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Fats and Glyceridic oils, biological studies
Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(partially hydrogenated; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Feed
(pet; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Food
(porridge; corn oil processing and products comprising corn oil and

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corn meal obtained from corn)

IT Bran
(rice; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Food
(snack; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Beverages
(sports; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stearins, oxy-; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Fuel oil
(substitutes; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Feed
(swine; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT 7440-37-1, Argon, biological studies 7727-37-9, Nitrogen, biological studies
RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT 56-87-1, L-Lysine, biological studies 63-68-3, L-Methionine, biological studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropyl alcohol, biological studies 73-22-3, L-Tryptophan, biological studies 77-92-9, Citric acid, biological studies 77-92-9D, Citric acid, monoglyceride derivs. 110-54-3, Hexane, biological studies 121-79-9, Propyl gallate 123-28-4, Dilauryl thiodipropionate 128-37-0, BHT, biological studies 137-66-6, Ascorbyl palmitate 458-37-7, Curcumin 994-36-5, Sodium citrate 1107-26-2, β -Apo-8'-carotenal 6829-55-6, Tocotrienol 7235-40-7, β -Carotene 7647-14-5, Sodium chloride, biological studies 7664-38-2, Phosphoric acid, biological studies 9000-90-2, α -Amylase 9001-92-7, Protease 9005-25-8, Starch, biological studies 9016-00-6, Dimethyl polysiloxane 9032-08-0, Glucoamylase 25013-16-5, BHA 25395-66-8, Ascorbyl stearate 39413-05-3, Isopropyl citrate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT 1393-63-1, Annatto
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(ext.; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT 124-38-9, Carbon dioxide, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(supercrit.; corn oil processing and products comprising corn oil and corn meal obtained from corn)

L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

AN 1998:410640 CAPLUS

DN 129:86023

ED Entered STN: 04 Jul 1998

TI Aerosol containing vitamin A or a derivative thereof

IN Thoma, Karl; Rothenberger, Siegfried; Hein, Thomas

PA Hermes Fabrik Pharmazeutischer Praeparate Franz Gradinger G.m.b.H. Co., Germany

SO Eur. Pat. Appl., 7 pp.

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CODEN: EPXXDW
DT Patent
LA German
IC ICM A61K009-12
ICS A61K031-07
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------------------------------------------------------------------------------------|------|----------|------------------|----------|
| PI | EP 848949 | A1 | 19980624 | EP 1997-122419 | 19971218 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| | DE 19652790 | A1 | 19980625 | DE 1996-19652790 | 19961218 |
| PRAI | DE 1996-19652790 | | 19961218 | | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|--|------------|-------|------------------------------------|
| | EP 848949 | ICM | A61K009-12 |
| | | ICS | A61K031-07 |

AB Vitamin A-contg. pharmaceutical aerosols for use on the respiratory tract mucosa are provided for treatment of disorders affecting the respiratory epithelium, e.g. neoplasms, metastases, squamous metaplasia, bronchitis, and newborn bronchopulmonary dysplasia. These compns. contain satd. hydrocarbons as solubilizers to improve the aerosolization of the active agent. At low concns., these hydrocarbons do not display the flammability, toxicity, and unpleasant flavor seen at higher concns. Thus, an aerosol prepn. contained retinol palmitate 1.10, DL- α -tocopherol 0.11, tetrafluoroethane 76.71, and isobutane 22.08 wt.%.

ST vitamin A solubilizer hydrocarbon aerosol; inhalant retinol solubilizer isobutane

IT Antitumor agents
Propellants (fuels)
Solubilizers
(aerosol contg. vitamin A or deriv. thereof)

IT Carotenes, biological studies
Retinoids

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(aerosol contg. vitamin A or deriv. thereof)

IT Hydrocarbons, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aerosol contg. vitamin A or deriv. thereof)

IT Bronchi
(bronchitis; aerosol contg. vitamin A or deriv. thereof)

IT Newborn
(bronchopulmonary dysplasia in; aerosol contg. vitamin A or deriv. thereof)

IT Lung, disease
(bronchopulmonary dysplasia, in newborn; aerosol contg. vitamin A or deriv. thereof)

IT Bronchi
Bronchi
(carcinoma; aerosol contg. vitamin A or deriv. thereof)

IT Respiratory tract
(ciliated epithelium, disorder; aerosol contg. vitamin A or deriv. thereof)

IT Epithelium
(ciliated, respiratory tract, disorder; aerosol contg. vitamin A or deriv. thereof)

IT Mucous membrane

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Mucous membrane
(disease; aerosol contg. vitamin A or deriv. thereof)

IT Cell differentiation
(disorder, of tracheobronchial tract; aerosol contg. vitamin A or deriv. thereof)

IT Poisons, nonbiological source
(gaseous, tracheobronchial epithelium damage from; aerosol contg. vitamin A or deriv. thereof)

IT Drug delivery systems
(inhalants; aerosol contg. vitamin A or deriv. thereof)

IT Bronchi
Trachea (anatomical)
Trachea (anatomical)
(mucosa, disease; aerosol contg. vitamin A or deriv. thereof)

IT Respiratory tract
Respiratory tract
(mucosa; aerosol contg. vitamin A or deriv. thereof)

IT Gland
(mucous, disorder; aerosol contg. vitamin A or deriv. thereof)

IT Mucous membrane
Mucous membrane
(respiratory tract; aerosol contg. vitamin A or deriv. thereof)

IT Epithelium
(squamous, disease, metaplasia; aerosol contg. vitamin A or deriv. thereof)

IT Mucous membrane
Mucous membrane
(trachea, disease; aerosol contg. vitamin A or deriv. thereof)

IT Dust
(tracheobronchial epithelium damage from; aerosol contg. vitamin A or deriv. thereof)

IT 68-26-8, Retinol 68-26-8D, Retinol, esters 79-81-2, Retinol palmitate 302-79-4, Retinoic acid 302-79-4D, Retinoic acid, esters 7235-40-7, β -Carotene
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aerosol contg. vitamin A or deriv. thereof)

IT 74-98-6, Propane, biological studies 75-28-5, Isobutane 106-97-8, n-Butane, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(solubilizer; aerosol contg. vitamin A or deriv. thereof)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Boehringer Ingelheim Int; WO 9111496 A CAPLUS
(2) Glaxo Group Ltd; WO 9311743 A CAPLUS
(3) Gradinger F Hermes Pharma; EP 0352412 A CAPLUS

=> s grain or fescue or clover or wheat or barley or oats or rye or sorghum or flax or tritica
273768 GRAIN
131456 GRAINS
352360 GRAIN
(GRAIN OR GRAINS)
3505 FESCUE
50 FESCUES
3514 FESCUE
(FESCUE OR FESCUES)
14319 CLOVER
501 CLOVERS
14442 CLOVER
(CLOVER OR CLOVERS)

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114091 WHEAT
2769 WHEATS
114186 WHEAT
(WHEAT OR WHEATS)
46763 BARLEY
896 BARLEYS
46815 BARLEY
(BARLEY OR BARLEYS)
13185 OATS
15109 RYE
62 RYES
15120 RYE
(RYE OR RYES)
13119 SORGHUM
343 SORGHUMS
13147 SORGHUM
(SORGHUM OR SORGHUMS)
8663 FLAX
17 FLAXES
8668 FLAX
(FLAX OR FLAXES)
1923 TRITICALE
126 TRITICALES
1931 TRITICALE
(TRITICALE OR TRITICALES)
77622 RICE
461 RICES
77638 RICE
(RICE OR RICES)
4 TRITICALE RICE
(TRITICALE (W) RICE)
111199 CORN
345 CORNS
111319 CORN
(CORN OR CORNS)
442 SPELT
70 SPELTS
502 SPELT
(SPELT OR SPELTS)
5204 MILLET
206 MILLETS
5246 MILLET
(MILLET OR MILLETS)
2537 AMARANTH
25 AMARANTHS
2547 AMARANTH
(AMARANTH OR AMARANTHS)
3511 BUCKWHEAT
12 BUCKWHEATS
3513 BUCKWHEAT
(BUCKWHEAT OR BUCKWHEATS)
566 QUINOA
1 QUINOAS
567 QUINOA
(QUINOA OR QUINOAS)
10 KAMUT
2335 TEFF
9 TEFFS
2339 TEFF
(TEFF OR TEFFS)
L3 609809 GRAIN OR FESCUE OR CLOVER OR WHEAT OR BARLEY OR OATS OR RYE OR SORGHUM OR FLAX OR TRITICALE RICE OR CORN OR SPELT OR MILLET OR

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AMARANTH OR BUCKWHEAT OR QUINOA OR KAMUT OR TEFF

=> 3 and (carotene or carotenoid or lycopene lutein or betatene)
3 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s 13 and (carotene or carotenoid or lycopene lutein or betatene)

27960 CAROTENE
20157 CAROTENES
38399 CAROTENE
(CAROTENE OR CAROTENES)

17279 CAROTENOID
22985 CAROTENOIDS
27802 CAROTENOID
(CAROTENOID OR CAROTENOIDS)

4100 LYCOPENE
53 LYCOPENES
4110 LYCOPENE
(LYCOPENE OR LYCOPENES)

5027 LUTEIN
36 LUTEINS
5036 LUTEIN
(LUTEIN OR LUTEINS)

84 LYCOPENE LUTEIN

(LYCOPENE (W) LUTEIN)

13 BETATENE

L4 4094 L3 AND (CAROTENE OR CAROTENOID OR LYCOPENE LUTEIN OR BETATENE)

=> s 14 and (vegetable oil or meadowfoam or peanut or cottonseed or rapeseed or rape seed or m

74343 VEGETABLE
24529 VEGETABLES
85891 VEGETABLE
(VEGETABLE OR VEGETABLES)

688257 OIL
329781 OILS
775486 OIL
(OIL OR OILS)

18323 VEGETABLE OIL
(VEGETABLE (W) OIL)

162 MEADOWFOAM
20918 PEANUT
4944 PEANUTS
22197 PEANUT

(PEANUT OR PEANUTS)

16294 COTTONSEED
428 COTTONSEEDS
16373 COTTONSEED
(COTTONSEED OR COTTONSEEDS)

8261 RAPESEED
183 RAPESEEDS
8302 RAPESEED
(RAPESEED OR RAPESEEDS)

17950 RAPE
67 RAPES
17964 RAPE
(RAPE OR RAPES)

123220 SEED
86209 SEEDS
165907 SEED
(SEED OR SEEDS)

STN Columbus

2185 RAPE SEED
(RAPE (W) SEED)
651 MACADAMIA
3 MACADAMIAS
651 MACADAMIA
(MACADAMIA OR MACADAMIAS)
2573 AVOCADO
343 AVOCADOS
2629 AVOCADO
(AVOCADO OR AVOCADOS)
14682 PALM
1143 PALMS
15071 PALM
(PALM OR PALMS)
30243 CASTOR
15 CASTORS
30255 CASTOR
(CASTOR OR CASTORS)
L5 316 L4 AND (VEGETABLE OIL OR MEADOWFOAM OR PEANUT OR COTTONSEED OR
RAPESEED OR RAPE SEED OR MACADAMIA OR AVOCADO OR PALM OR CASTOR)

=> s 15 and (thermal or heat?)
954571 THERMAL
66 THERMALS
954600 THERMAL
(THERMAL OR THERMALS)
2156456 HEAT?
L6 36 L5 AND (THERMAL OR HEAT?)

=> d 16 1-36 ti

L6 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Production method for particles containing lipophilic compounds, and
apparatus therefor

L6 ANSWER 2 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Edible fat emulsions as food spreads.

L6 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI β,β -Carotene and 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline
mixtures as diesel fuel stabilizers and cetane improvers

L6 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI A strong constitutive promoter from the parsley ubiquitin gene and its use
in expression of foreign genes in plants

L6 ANSWER 5 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Cosmetic compositions comprising silicone gels

L6 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Cosmetic compositions comprising silicone gels comprising entrapped,
occluded or encapsulated pigments

L6 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Optothermal window method for on-line monitoring of decay kinetics of
trans- β -carotene in thermally treated vegetable oils

L6 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Purification and characterization of an autoclavable superoxide dismutase
(SOD) isozyme from Potentilla atrosanguinea, and use of the SOD in
cosmetic, food and pharmaceutical compositions

STN Columbus

- L6 ANSWER 9 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Fast quality screening of **vegetable oils** by HPLC-**thermal** lens spectrometric detection
- L6 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing **carotenoid** emulsion
- L6 ANSWER 11 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Ultrasensitive assays of trans- and cis- β -**carotenes** in **vegetable oils** by high-performance liquid chromatography-**thermal** lens detection
- L6 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Unsaponifiables-enriched **vegetable oil** as food ingredient
- L6 ANSWER 13 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles
- L6 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Nutrient intensified oil and its preparing process
- L6 ANSWER 15 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Diurnal changes of photooxidation response in leaves of C3 and C4 plants
- L6 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Effect of traditional processing practices on the content of total **carotenoid**, β -**carotene**, α -**carotene** and vitamin A activity of selected Tanzanian vegetables
- L6 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Detection of process components in food process streams by fluorescence
- L6 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Compositions containing water-soluble hemicellulose and natural resins
- L6 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI **Carotene** removal from **corn** meal
- L6 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process of obtaining the sea buckthorn oil "aska-tesh"
- L6 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Cream cheese type food
- L6 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI **Rapeseed** meal in the diet of common carp reared in **heated** waters. V. **Carotenoids** in diets and fish tissues
- L6 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Low fat comestible spread
- L6 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Stable clear liquid release agent
- L6 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI The preparation of water-soluble powdered β -**carotene** and its preservation stability
- L6 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Fixing lipophilic substances on starch, starch derivatives, or materials containing them

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- L6 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Suitability of some Egyptian clays for bleaching **cottonseed oil**. III.
Regeneration of spent clays
- L6 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Margarine oil compositions
- L6 ANSWER 29 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of β -**carotene**
- L6 ANSWER 30 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Stabilized **carotene** composition
- L6 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of **carotene** homologs
- L6 ANSWER 32 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI δ -Tocopherol. I. Isolation from soybean oil and properties
- L6 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Chemical estimation of vitamin E in **vegetable oils**
- L6 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Stabilizing **cottonseed oil** or other glyceridic oils against oxidative
deterioration
- L6 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Improving the quality of milk
- L6 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI Stabilizing fats and oils against rancidity

=> d 16 7 10 23 24 all

- L6 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
- AN 2003:540724 CAPLUS
DN 139:349781
ED Entered STN: 15 Jul 2003
TI Optothermal window method for on-line monitoring of decay kinetics of
trans- β -**carotene** in thermally treated **vegetable oils**
AU Ganguli, Otto; Bicanic, Dane; Bonifacic, Marija; Nicoli, Maria Cristina;
Chirtoc, Mihai
CS Agrotechnology and Food Sciences, Division of Biophysics, Laser Laboratory
for Photoacoustic and Photothermal Research, Wageningen University and
Research Centre, Wageningen, 6703 HA, Neth.
SO European Food Research and Technology (2003), 217(1), 74-79
CODEN: EFRTFO; ISSN: 1438-2377
PB Springer-Verlag
DT Journal
LA English
CC 17-1 (Food and Feed Chemistry)
AB The optothermal window detection method at 488 nm was used to monitor
online the concn. of trans- β -**carotene** that was added to several
vegetable oils after treating them at 200° in the presence of
air for varying amts. of time. Results obtained for extra virgin oil show
a direct proportionality between the rate const. describing the
disappearance of trans- β -**carotene** and the duration of **thermal**
treatment. The rate const. for the decay of trans- β -**carotene** in
oils treated under identical conditions was also dependent on the type of
oil. Trends and individual data are discussed in the light of a possible

STN Columbus

application of the method for the detn. of the oxidative stability of vegetable oils.

ST vegetable oil carotene optothermal window photoacoustic spectroscopy

IT Olive oil
RL: AMX (Analytical matrix); ANST (Analytical study)
(extra virgin; optothermal window method for online monitoring of decay kinetics of trans- β -carotene in thermally treated vegetable oils)

IT Photoacoustic spectroscopy
Reaction kinetics
(optothermal window method for online monitoring of decay kinetics of trans- β -carotene in thermally treated vegetable oils)

IT Corn oil
Safflower oil
Sunflower oil
RL: AMX (Analytical matrix); ANST (Analytical study)
(optothermal window method for online monitoring of decay kinetics of trans- β -carotene in thermally treated vegetable oils)

IT Fats and Glyceridic oils, analysis
RL: AMX (Analytical matrix); ANST (Analytical study)
(vegetable; optothermal window method for online monitoring of decay kinetics of trans- β -carotene in thermally treated vegetable oils)

IT 7235-40-7, β , β -Carotene
RL: ANT (Analyte); ANST (Analytical study)
(optothermal window method for online monitoring of decay kinetics of trans- β -carotene in thermally treated vegetable oils)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Bicanic, D; Appl Spectrosc 1995, V49, P1485 CAPLUS
- (2) Chen, B; J Agric Food Chem 1994, V42, P2391 CAPLUS
- (3) Doka, O; Anal Chem 2002, V74, P2157 CAPLUS
- (4) Halliwell, B; Crit Rev Food Sci 1995, V35, P7 CAPLUS
- (5) Helander, P; Meas Sci Technol 1993, V4, P178
- (6) Henry, L; J Am Oil Chem Soc 1998, V75, P823 CAPLUS
- (7) Labuza, T; J Am Oil Chem Soc 1969, V46, P409 CAPLUS
- (8) Loliger, J; J Sci Food Agric 1990, V52, P119
- (9) Matthaus, B; J Am Oil Chem Soc 1996, V73, P1039 CAPLUS
- (10) McQueen, D; Anal Chem 1995, V14, P482 CAPLUS
- (11) Minguez-Mosquera, M; J Sci Food Agric 1995, V67, P153
- (12) Pagano, T; Rev Ing Quim 1999, V15, P11
- (13) Pellegrini, N; J Agric Food Chem 2001, V49, P2532 CAPLUS
- (14) Steenson, D; J Am Oil Chem Soc 2000, V77, P153

L6 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

AN 2002:556118 CAPLUS
DN 137:108618
ED Entered STN: 26 Jul 2002
TI Process for producing carotenoid emulsion
IN Mori, Toshiki; Mimura, Satoshi; Nakatani, Tomonari
PA Kuraray Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C09K003-00
NCL 516073000
CC 17-4 (Food and Feed Chemistry)

STN Columbus

Section cross-reference(s): 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | US 2002099102 | A1 | 20020725 | US 2002-52456 | 20020123 |
| | US 6664300 | B2 | 20031216 | | |
| | EP 1227082 | A1 | 20020731 | EP 2002-166 | 20020108 |
| | EP 1227082 | B1 | 20040616 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | AT 269301 | E | 20040715 | AT 2002-166 | 20020108 |
| | CN 1367167 | A | 20020904 | CN 2002-100969 | 20020110 |
| | JP 2002302479 | A2 | 20021018 | JP 2002-13194 | 20020122 |
| | JP 2002316924 | A2 | 20021031 | JP 2002-13195 | 20020122 |
| PRAI | JP 2001-15267 | A | 20010124 | | |
| | JP 2001-15274 | A | 20010124 | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|------------------------------------|
| US 2002099102 | ICM | C09K003-00 |
| | NCL | 516073000 |
| US 2002099102 | ECLA | C07C175/00B |

AB Disclosed is a process for producing a **carotenoid** emulsion which comprises heating a suspension of the **carotenoid** in a high boiling org. liq., by passing the suspension through a conduit of 0.1 to 50 mm inside diam. heated to temp. at 120-700° for a residence time of 0.05 to 5 s or by mixing the suspension with a high boiling org. liq. heated to the range of 120 to 500° for a time of 0.05 to 10 s, to dissolve the **carotenoid**, and then immediately adding the resulting soln. into an aq. soln. of an emulsifier to emulsify the soln. By this prodn. process, an emulsion contg. a **carotenoid** as an effective ingredient can be produced with the **carotenoid** maintaining a high total trans-form proportion, with good productivity, conveniently, and industrially advantageously.

ST **carotenoid** emulsion prodn process

IT Fatty acids, biological studies

RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(C16-18, esters with sucrose, emulsifiers; process for producing **carotenoid** emulsion)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(C8-14, esters with sucrose, emulsifiers; process for producing **carotenoid** emulsion).

IT Fatty acids, biological studies

RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(castor-oil, esters with sorbitan, emulsifiers; process for producing **carotenoid** emulsion)

IT Alkali metal compounds

RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(emulsifiers; process for producing **carotenoid** emulsion)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

STN Columbus

(esters, emulsifiers, of ascorbic acid and sorbitan; process for producing carotenoid emulsion)

IT Corn oil
 Diglycerides
 Edible oils
 Glycerides, biological studies
 Monoglycerides
 Paraffin oils
 Terpenes, biological studies
 RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (high boiling org. liq.; process for producing carotenoid emulsion)

IT Antioxidants
 Emulsifying agents
 Emulsions
 (process for producing carotenoid emulsion)

IT Carotenes, biological studies
 RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (process for producing carotenoid emulsion)

IT Fatty acids, biological studies
 RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (tall-oil, esters with sorbitan, emulsifiers; process for producing carotenoid emulsion)

IT 137-66-6, Ascorbic acid palmitate 1310-73-2, Sodium hydroxide, biological studies
 RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (emulsifiers; process for producing carotenoid emulsion)

IT 25496-72-4, Monoolein
 RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (high boiling org. liq.; process for producing carotenoid emulsion)

IT 472-61-7, Astaxanthin 472-70-8, Cryptoxanthin 514-78-3, Canthaxanthin 3604-90-8, Citranaxanthin 7235-40-7, β -Carotene 12676-20-9, Apocarotenal
 RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (process for producing carotenoid emulsion)

L6 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

AN 1982:508798 CAPLUS
 DN 97:108798
 ED Entered STN: 12 May 1984
 TI Low fat comestible spread
 IN Miller, Donald E.; Werstak, Charles E.
 PA SCM Corp. , USA
 SO Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC A23D003-00; A23L001-24; A23C020-00

STN Columbus

CC 17-9 (Food and Feed Chemistry)

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------------------------------|------|----------|-----------------|----------|
| PI | EP 49705 | A1 | 19820421 | EP 1980-106140 | 19801009 |
| | R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| | PRAI EP 1980-106140 | | 19801009 | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES | | |
|------------|-------|------------------------------------|--|--|
|------------|-------|------------------------------------|--|--|

| | | | | |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|------------|
| EP 49705 | IC | A23D003-00IC | A23L001-24IC | A23C020-00 |
| AB | An oil-in-water emulsion suitable for use in the prodn. of low-fat analogs of margarine, mayonnaise, or cheese is prep'd. from an emulsifier, a thickening agent, a fat with a Wiley m.p. of 24-41° and a solid fat index at 35.5° of ≤20 and at 37.5° essentially zero, and optionally flavoring and coloring agents. Thus, water (68.31%) was mixed with Methocel K-100M (hydroxypropylmethyl cellulose) [9004-65-3] (0.5%), Avicel RC 581 (cellulose prepn.) [51395-75-6] (0.5%), and β-carotene (0.09%) with heat; Dur-em 114 emulsifier (monoglycerides) (4.0%), dewaxed corn oil (11.25%), hydrogenated cottonseed-soybean oil (13.75%), and artificial butter flavor (0.1%) were added; the material was homogenized at 1000-2000 psig; salt was added; and the emulsion was cooled, yielding a margarine-like product. | | | |
| ST | emulsion food fat; margarine fat low emulsion; cheese substitute emulsion; mayonnaise substitute emulsion | | | |
| IT | Soybean oil
RL: BIOL (Biological study)
(cottonseed oil mixt. with, hydrogenated, food fat-low emulsion contg.) | | | |
| IT | Butter substitutes
Cheese substitutes
Margarine
(fat-low, emulsion for) | | | |
| IT | Corn oil
RL: BIOL (Biological study)
(food fat-low emulsion contg.) | | | |
| IT | Cottonseed oil
RL: BIOL (Biological study)
(soybean oil mixt. with, hydrogenated, food fat-low emulsion contg.) | | | |
| IT | Mayonnaise
(substitutes, fat-low, emulsion for) | | | |
| IT | Food
(emulsions, fat-low, manuf. of) | | | |
| IT | Glycerides, biological studies
RL: BIOL (Biological study)
(mono-, in food fat-low emulsion manuf.) | | | |
| IT | 9004-32-4 9004-65-3 51395-75-6
RL: BIOL (Biological study)
(in food fat-low emulsion manuf.) | | | |
| IT | 9004-34-6, biological studies
RL: BIOL (Biological study)
(microcryst., in food fat-low emulsion manuf.) | | | |

L6 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text

AN 1980:406377 CAPLUS

DN 93:6377

ED Entered STN: 12 May 1984

TI Stable clear liquid release agent

IN Hanson, Harold W., Sr.

PA Par-Way Mfg. Co., USA

SO U.S., 4 pp. Cont.-in-part of U.S. Ser. No. 532,850. abandoned.

STN Columbus

CODEN: USXXAM
 DT Patent
 LA English
 IC A23D005-00
 NCL 426250000
 CC 17-2 (Foods)
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 4192898 | A | 19800311 | US 1978-916116 | 19780616 |
| | US 4096258 | A | 19780620 | US 1977-772929 | 19770228 |
| PRAI | US 1974-532850 | | 19741216 | | |
| | US 1975-621309 | | 19751010 | | |
| | US 1977-772929 | | 19770228 | | |

CLASS

| | PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|--|------------|-------|------------------------------------|
| | US 4192898 | IC | A23D005-00 |
| | | NCL | 426250000 |

AB A stable clear pan release agent consists of 0.25-2% by wt. Polysorbate 80 [9005-65-6] in a mixt. of 2 or more oils, the major oil being liq. at room temp., and the minor one being solid at room temp. The oils are agitated at ~74°, rapidly chilled and worked to at least 25°; worked at that temp., and combined with CO₂ propellant to yield an aerosol product. Thus, about half of 2675 lb soybean oil and 1784 lb coconut oil were heated and mixed to 70°, the immersion heaters were cut off, 240 lb double-bleached lecithin was mixed in for 10 min, the balance of the soybean and coconut oils was added followed by 36.9 lb Polysorbate 80, 2.4 lb BEX butter deriv., and 3.8 or β-carotene. The batch was mixed for 3 min, cooled to ~60°, and passed through a 2-stage homogenizer (1000 and 3500 psi, resp.), and cooled to ~38°. The blend was agitated rapidly in a Votator while chilling to ~21°, and then worked with a high-speed paddle mixer. The product was clear and brilliant.

ST pan release agent; cooking utensil release agent

IT Coconut oil

Corn oil

Cottonseed oil

Lecithins, biological studies

Peanut oil

Soybean oil

RL: BIOL (Biological study)

(of cooking utensil release agents)

IT Oils

RL: BIOL (Biological study)

(palm kernel, of cooking utensil release agents)

IT Oils

RL: BIOL (Biological study)

(palm, of cooking utensil release agents)

IT Cooking utensils

(release agents for)

IT 637-12-7 9005-65-6

RL: BIOL (Biological study)

(of cooking utensil release agents)

IT 124-38-9, uses and miscellaneous

RL: USES (Uses)

(propellant, for aerosol cooking utensil release agents)

=> d his

(FILE 'HOME' ENTERED AT 17:00:22 ON 29 OCT 2004)

STN Columbus

FILE 'CAPLUS' ENTERED AT 17:00:37 ON 29 OCT 2004

L1 45 S FUEL AND (VITAMIN E OR TOCOPHEROL)
 L2 2 S L1 AND CAROTENE
 L3 609809 S GRAIN OR FESCUE OR CLOVER OR WHEAT OR BARLEY OR OATS OR RYE O
 L4 4094 S L3 AND (CAROTENE OR CAROTENOID OR LYCOPENE LUTEIN OR BETATENE
 L5 316 S L4 AND (VEGETABLE OIL OR MEADOWFOAM OR PEANUT OR COTTONSEED O
 L6 36 S L5 AND (THERMAL OR HEAT?)

=> s 15 and (vitamin e or tocopherol)
 176528 VITAMIN
 49415 VITAMINS
 195026 VITAMIN
 (VITAMIN OR VITAMINS)

1802584 E
 28667 VITAMIN E
 (VITAMIN(W) E)
 27205 TOCOPHEROL
 8044 TOCOPHEROLS
 29454 TOCOPHEROL
 (TOCOPHEROL OR TOCOPHEROLS)

L7 107 L5 AND (VITAMIN E OR TOCOPHEROL)

=> s 17 and diesel
 40979 DIESEL
 423 DIESELS
 41029 DIESEL
 (DIESEL OR DIESELS)

L8 1 L7 AND DIESEL

=> d 18 all

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text

AN 2003:334695 CAPLUS
 DN 138:336957
 ED Entered STN: 02 May 2003
 TI Corn oil processing and products comprising corn oil and corn meal obtained from corn
 IN Jakel, Neal T.; Kotowski, Doug; Ingvalson, Joel; Beaver, Michael J.; Ulrich, James F.; Amore, Francis; Tupy, Michael J.; Fox, Eugene J.; Patist, Alexander
 PA Renessen, LLC, USA
 SO U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 927,836.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM C11C001-00
 ICS A21D002-00
 NCL 554010000; 554020000; 426622000
 CC 17-9 (Food and Feed Chemistry)
 Section cross-reference(s): 18, 45, 51, 62
 FAN.CNT 10

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 2003083512 | A1 | 20030501 | US 2002-47725 | 20020115 |
| | US 6610867 | B2 | 20030826 | | |
| | US 2002193617 | A1 | 20021219 | US 2001-927836 | 20010810 |
| | US 6648930 | B2 | 20031118 | | |
| | US 2003224496 | A1 | 20031204 | US 2003-368521 | 20030218 |
| PRAI | US 2000-637843 | A2 | 20000810 | | |
| | US 2001-927836 | A2 | 20010810 | | |

STN Columbus

| | | |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US 1999-249280 | A2 | 19990211 |
| US 2002-47725 | A2 | 20020115 |
| CLASS | | |
| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
| US 2003083512 | ICM | C11C001-00 |
| | ICS | A21D002-00 |
| | NCL | 554010000; 554020000; 426622000 |
| US 2003083512 | ECLA | A23D009/00; A23K001/18K; A23K001/18L2; A23K001/18N;
A23K001/18S; A23L001/10M; A23L001/105B; A23L001/30C;
C08B030/10; C08L099/00; C11B001/04; C11B001/10;
C11B003/00B; C12P007/06; A23D009/007; A23K001/00B2;
A23K001/14; A23K001/16G; A23K001/16L; A23K001/18 |
| US 2002193617 | ECLA | A23D009/00; C11B001/10; C11B003/00B; C12P007/06;
A23D009/007; A23J001/14C2; A23K001/00B2; A23K001/04;
A23K110/; A23K001/10C; A23K001/14; A23K;
A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2;
A23K001/18N; A23K001/18S; A23L001/10M; A23L001/30C;
B02B001/00; C08B030/10; C08L099/00; C11B001/04;
C11B001/06 |
| US 2003224496 | ECLA | A23D009/00; A23D009/007; A23J001/14C2; A23K001/00B2;
A23K001/04; A23K001/10; A23K001/10C; A23K001/14; A23K;
A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2;
A23K001/18N; A23K001/18S; A23L001/10M; A23L001/105;
A23L001/30C; B02B001/00; C08B030/10; C08L099/00;
C11B001/04; C11B001/06; C11B001/10; C11B003/00B; C12P |
| AB | Corn oil and corn meal obtained from corn are included in useful products. The corn oil is extd. from the corn to form the corn meal. The corn grain process generally includes the steps of cracking corn grain having a total oil content of from about 3% to 30% by wt. and extg. the corn oil from the cracked corn grain. The corn oil is useful for making nutritionally enhanced edible oil or cooking oil, lubricants, biodiesel, fuel, cosmetics and oil-based or oil-contg. chem. products. The extd. corn meal is useful for making enhanced animal feed rations, snack food, blended food products, cosmetics, and fermn. broth additive. | |
| ST | corn meal oil manuf feed food fuel cosmetic | |
| IT | Fats and Glyceridic oils, biological studies | |
| | RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) | |
| | (animal; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Food | |
| | (bars; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Diesel fuel substitutes | |
| | (biodiesel; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Oryza sativa | |
| | (bran; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Bakery products | |
| | Triticum aestivum | |
| | (byproducts; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Solvent extraction | |
| | (continuous; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Food viscosity | |
| | (controls for; corn oil processing and products comprising corn oil and corn meal obtained from corn) | |
| IT | Glutens | |
| | RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) | |

STN Columbus

(corn meal; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Acidity
Air
Antioxidants
Biodegradable materials
Bleaching
Bread
Breakfast cereal
Canola
 Cottonseed
Crosslinking agents
Deodorization
Dietary fiber
Feed additives
Feeding experiment
Food additives
Food processing
Gallus domesticus
Glycine max
Helianthus annuus
Herb
Hordeum vulgare
Micelles
Nutrients
Pigments, biological
 Rapeseed
 Rapeseed
Solanum tuberosum
 Sorghum bicolor
Spices
Thickening agents
Vinegar
Zea mays
 (corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Aldehydes, biological studies
Anhydrides
Epoxides
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Amino acids, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Canola oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Carotenes, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Enzymes, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

STN Columbus

- (corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Lipids, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Mineral elements, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Olive oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Palm oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Proteins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Safflower oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Soybean oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Sterols
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Sunflower oil
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Tocopherols
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Vitamins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Corn oil
RL: FFD (Food or feed use); IMF (Industrial manufacture); BIOL (Biological
study); PREP (Preparation); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)
- IT Flours and Meals
(corn; corn oil processing and products comprising
corn oil and corn meal obtained from corn)
- IT Bos taurus
(dairy cattle; corn oil processing and products comprising
corn oil and corn meal obtained from corn)
- IT Vitamins
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(fat-sol.; corn oil processing and products comprising
corn oil and corn meal obtained from corn)
- IT Flours and Meals

STN Columbus

(feather meal; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Aquaculture
Bos taurus
Equus caballus
Poultry
Sus scrofa domestica
(feed for; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Catfish
Tilapia
(feeding; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Zea mays
(flour and meal; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Binders
(for food; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Oryza sativa
(hulls; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Beverages
(low calorie; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Feather
(meal; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Bone meal
Meat
(meat-and-bone meal; corn oil processing and products
comprising corn oil and corn meal obtained from
corn)

IT Triticum aestivum
(middlings; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Cooking
(oils for; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Seed
(oilseed, meal; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Flours and Meals
(oilseed; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Fats and Glyceridic oils, biological studies
Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(partially hydrogenated; corn oil processing and products
comprising corn oil and corn meal obtained from
corn)

IT Feed
(pet; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Food
(porridge; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Bran
(rice; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Food

STN Columbus

(snack; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Beverages
(sports; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Fats and Glyceridic oils, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(stearins, oxy-; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Fuel oil
(substitutes; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT Feed
(swine; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT 7440-37-1, Argon, biological studies 7727-37-9, Nitrogen, biological
studies
RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)

IT 56-87-1, L-Lysine, biological studies 63-68-3, L-Methionine, biological
studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropyl
alcohol, biological studies 73-22-3, L-Tryptophan, biological studies
77-92-9, Citric acid, biological studies 77-92-9D, Citric acid,
monoglyceride derivs. 110-54-3, Hexane, biological studies 121-79-9,
Propyl gallate 123-28-4, Dilauryl thiodipropionate 128-37-0, BHT,
biological studies 137-66-6, Ascorbyl palmitate 458-37-7, Curcumin
994-36-5, Sodium citrate 1107-26-2, β -Apo-8'-carotenal 6829-55-6,
Tocotrienol 7235-40-7, β -Carotene 7647-14-5, Sodium
chloride, biological studies 7664-38-2, Phosphoric acid, biological
studies 9000-90-2, α -Amylase 9001-92-7, Protease 9005-25-8,
Starch, biological studies 9016-00-6, Dimethyl polysiloxane 9032-08-0,
Glucoamylase 25013-16-5, BHA 25395-66-8, Ascorbyl stearate
39413-05-3, Isopropyl citrate
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(corn oil processing and products comprising corn
oil and corn meal obtained from corn)

IT 1393-63-1, Annatto
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(ext.; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

IT 124-38-9, Carbon dioxide, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(supercrit.; corn oil processing and products comprising
corn oil and corn meal obtained from corn)

=> s triticale
1923 TRITICALE
126 TRITICALES
L9 1931 TRITICALE
(TRITICALE OR TRITICALES)

=> s l9 and corn
111199 CORN
345 CORNS
111319 CORN
(CORN OR CORNS)
L10 250 L9 AND CORN

=> s l10 and fuel

STN Columbus

340874 FUEL
154939 FUELS
389767 FUEL
(FUEL OR FUELS)
L11 2 L10 AND FUEL

=> d 111 ti

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
TI Quality of solid biofuels - database and field trials

=> d 111 2 ti

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
TI Protein byproduct recovery in fuel ethanol processing of agricultural materials

=> d 111 1 all

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
AN 1999:713328 CAPLUS
DN 132:24771
ED Entered STN: 09 Nov 1999
TI Quality of solid biofuels - database and field trials
AU Hartmann, H.; Maier, L.; Bohm, T.
CS Research Center of Agricultural Engineering, Munich University of Technology, Freising-Weihenstephan, D-85354, Germany
SO Biomass: A Growth Opportunity in Green Energy and Value-Added Products, Proceedings of the Biomass Conference of the Americas, 4th, Oakland, Calif., Aug. 29-Sept. 2, 1999 (1999), Volume 1, 273-279. Editor(s): Overend, Ralph P.; Chornet, Esteban. Publisher: Elsevier Science, Oxford, UK.
CODEN: 68IQAG
DT Conference
LA English
CC 52-1 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 11, 40, 60
AB Quality aspects of solid biofuels were investigated in a new database. Most parameters varied greatly, particularly when annually harvested biomass was considered. For planning purposes the frequency distributions should be used rather than mean values. The quality of some crops may be changed by modified agricultural practices. Rainfall shortly after cutting can deplete chlorine and potassium in grass by 60 to 80%.
ST solid biofuel quality database field trial; fuel gas manufg solid biofuel
IT Fuels
(biofuels, solid; field trials of solid biofuel quality and database of identity, age, origin, fuel characteristics, element and compd. content, testing methodol., related literature)
IT Beech (Fagus)
Miscanthus
Spruce (Picea)
Wheat straw
(chlorine content of solid biofuel, from database)
IT Straw
Straw
(corn; chlorine content of solid biofuel, from database)
IT Bagasse
Bark
Compost

Databases
Grass (Poaceae)
Hay
Leaf
Straw
(field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Fibers
RL: NUU (Other use, unclassified); USES (Uses)
(field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Mineral elements, occurrence
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
(frequency distribution, selected quality parameters, similar cereal straw types, from database)

IT Wood
(natural, processed; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Leaf
(needle; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Calorific value
(net; frequency distribution, selected quality parameters, similar cereal straw types, from database)

IT Flours and Meals
(oilseed cakes; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Seed
Seed
(oilseed, meal; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Flours and Meals
(oilseed; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Fruit
(pips; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Fermentation
(products, pomace; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Straw
Straw
(rape; chlorine content of solid biofuel, from database)

IT Straw
Straw
(rye; chlorine content of solid biofuel, from database)

IT Nut (seed)
(shells; field trials of solid biofuel quality and database of identity, age, origin, **fuel** characteristics, element and compd. content, testing methodol., related literature)

IT Poplar (*Populus*)
Willow (*Salix*)
(short rotation forestry; chlorine content of solid biofuel, from

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        database)
IT   Corn
      Corn
      Rape (plant)
      Rape (plant)
      Rye
      Rye
      Sunflower
      Sunflower
      Triticale
      Triticale
      (straw; chlorine content of solid biofuel, from database)
IT   Straw
      Straw
      (sunflower; chlorine content of solid biofuel, from database)
IT   Straw
      Straw
      (triticale; chlorine content of solid biofuel, from database)
IT   Rye
      Triticale
      Wheat
      (whole crop; chlorine content of solid biofuel, from database)
IT   7782-50-5, Chlorine, occurrence
      RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
          (chlorine content, solid biofuels)
IT   7704-34-9, Sulfur, occurrence
      RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
          (effect of harvesting date and field retention time, selected quality
           parameters in grass, from database)
IT   7440-09-7, Potassium, occurrence  7727-37-9, Nitrogen, occurrence
      RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
          (frequency distribution, selected quality parameters, similar cereal
           straw types, from database)

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=> log y

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 138.86 | 139.07 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -5.60 | -5.60 |

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STN INTERNATIONAL LOGOFF AT 17:18:30 ON 29 OCT 2004